

LISTING OF THE CLAIMS

We Claim:

1. (Currently amended) A stent having a metallic, relatively radiolucent carrier structure ~~(12, 16)~~ comprising a cut out ~~which is made from a metal tube as starting material by cutting out~~, and at least one marker element (22) which includes comparatively radiopaque material (32), wherein ~~characterized in that after the cutting out operation~~ the marker element (22) is ~~welded~~ attached to the rest of the carrier structure ~~(12, 16)~~ and the radiopaque material (32) is completely enclosed by a cover layer (34) of a material other than the radiopaque material, the cover layer (34) including a metal or a metal compound.
2. (Currently amended) A stent as set forth in claim 1, ~~characterized in that~~ wherein the stent has a carrier structure ~~(12, 16)~~ which is produced by cutting out legs ~~(12, 16)~~ and apertures for marker elements (22) from a metal tube and the marker elements (22) are welded into said apertures.
3. (Currently amended) A stent as set forth in claim 1, ~~or claim 2 characterized in that~~ wherein the stent (10) has a self-expanding carrier structure.
4. (Currently amended) A stent as set forth in claim 3, ~~characterized in that~~ wherein the carrier structure ~~(12, 16)~~ includes a shape memory metal which changes its shape at a change temperature, wherein the stent is of such a design configuration that the stent retains a compressed condition below the change temperature and assumes an expanded condition above the change temperature.

5. (Currently amended) A stent as set forth in claim 1, ~~characterized in that~~ wherein the cover layer contains silicon carbide (SiC).
6. (Currently amended) A stent as set forth in claim 1, ~~characterized in that~~ wherein the cover layer (34) is formed by a metal which forms the metallic carrier structure and into which the radiopaque material (32) is ~~let~~ placed.
7. (Currently amended) A stent as set forth in claim 6, ~~characterized in that~~ wherein the marker element (22) ~~is formed by~~ comprises radiopaque material (32) filling a lumen of a tube (34) formed from the metal of the carrier structure.
8. (Currently amended) A stent as set forth in claim 7, ~~characterized in that~~ wherein the tube forms at least a part of the carrier structure.
9. (Currently amended) A stent as set forth in ~~one of claims 1~~ claim 8, ~~through 8~~ characterized in that wherein the marker element forms at least a part of the carrier structure in the region of a longitudinal end of the stent.
10. (Currently amended) A stent as set forth in ~~one of claims~~ claim 9, ~~1 through 9~~ characterized in that wherein the marker element is welded to the rest of the carrier structure in the region of a longitudinal end of the stent (10).
11. (Currently amended) A stent as set forth in claim 1, ~~characterized in that~~ wherein the metal forming the carrier structure is ~~entirely or~~ at least partially a titanium nickel alloy ~~such as nitinol~~.

12. (Currently amended) A stent as set forth in claim 1, ~~characterized in that~~ wherein the radiopaque material contains gold, platinum or palladium.
13. (New) A stent as set forth in claim 2, wherein the stent has a self-expanding carrier structure.
14. (New) A stent as set forth in claim 13, wherein the carrier structure includes a shape memory metal which changes its shape at a change temperature, wherein the stent is of such a design configuration that the stent retains a compressed condition below the change temperature and assumes an expanded condition above the change temperature.
15. (New) A stent as set forth in claim 1, wherein the marker element forms at least a part of the carrier structure in the region of a longitudinal end of the stent.
16. (New) A stent as set forth in claim 15, wherein the marker element is welded to the rest of the carrier structure in the region of a longitudinal end of the stent.
17. (New) A stent as set forth in claim 5, wherein the marker element forms at least a part of the carrier structure in the region of a longitudinal end of the stent.
18. (New) A stent as set forth in claim 17, wherein the marker element is welded to the rest of the carrier structure in the region of a longitudinal end of the stent.
19. (New) A stent as set forth in claim 5, wherein the marker element forms at least a part of the carrier structure in the region of a longitudinal end of the stent.
20. (New) A method of treating a patient, the method comprising implanting a stent into the patient, wherein the stent comprises a cut out metal tube and at least one marker

element, and wherein the at least one marker element includes comparatively radiopaque material and further wherein the marker element is attached to the rest of the carrier structure and the radiopaque material is completely enclosed by a cover layer of a material other than the radiopaque material and the cover layer including a metal or a metal compound.